REMARKS

Claim Amendments

Claims 1, 8, 10, 11, 12 and 13 have been canceled. Claims 14-27 are withdrawn.

Claim 2 has been amended to use the transitional phrase "consisting essentially of" and to include the limitations of original claims 8 and 10. Claims 3-7 and 9 depend directly or indirectly from claim 2.

Art Rejections

Claims 1 and 2 were rejected under 35 USC 102(b) as being anticipated by Wiggins, "Design of bioabsorbable, amorphous polymer networks and composites" ("Wiggins"). Wiggins has prepared poly(D, L-lactide-co-[epsilon]-caprolactone) fumarate. The transitional phrase "consisting essentially of" in amended claim 2 excludes lactide groups as in Wiggins. In this regard, the lactide groups of Wiggins may adversely affect the softening temperature of a polymer. See page 3, lines 23-25 of the present specification. It is submitted that the rejection under Wiggins has been overcome by the amendments to claim 2.

Claims 1-2 and 9-10 were rejected under 35 USC 102(b) as being anticipated by Chung *et al.*, European Polymer Journal, 39, 1817-1822 ("Chung"). Chung has prepared polycaprolactone trimethacrylate di(propylene fumarate)–dimethacrylate (PCL900/TMA/DPFDMA). The transitional phrase "consisting essentially of" in amended claim 2 excludes methacrylate groups as in Chung. In this regard, the methacrylate groups of Chung may adversely affect the biodegradability of a polymer. See page 2, line 29 of the present specification. It is submitted that the rejection under

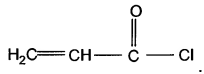
Chung has been overcome by the amendments to claim 2.

Claims 1-2 and 8 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent No. 4,082,816 to Fisk *et al.* ("Fisk"). Fisk has prepared a coating composition by "polymerizing a mixture of vinyl monomers, including at least one monomer containing a -COOH and/or -OH functional group, with ε-caprolactone" (column 1, lines 65-68 of Fisk , underlining added). Throughout the Examples of Fisk either an acrylate or a methacrylate monomer is used. The transitional phrase "consisting essentially of" in amended claim 2 excludes the mixtures of vinyl monomers as in Fisk. In this regard, the acrylate or methacrylate groups of Fisk may adversely affect the biodegradability of a polymer. See page 2, line 29 of the present specification. It is submitted that the rejection under Fisk has been overcome by the amendments to claim 2.

Claims 1-8 and 11-13 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent No. 5,747,605 to Breant *et al.* ("Breant"). Breant has prepared polymers in which the "polycaprolactones employed are of high molecular weights and of two types: Tone 767E supplied by Union Carbide Company, of melt index of 30 dg/min, measured at 190.degree. C. under a 2.16-kg load. Capa 680, supplied by Solvay Interox, of molecular mass of 80,000... ." (See column 6, lines 55-62 of Breant. Underlining added.) Claim 2 now requires using a poly(caprolactone) having a molecular weight in the range of 500-10000 daltons. The molecular weight now recited in claim 2 is well below the polymers used in Breant. Furthermore, the high molecular weight polymers used in Breant may increase viscosity and softening temperature above that suitable for tissue engineering applications. It is submitted that the rejection

under Breant has been overcome by the amendments to claim 2.

Claims 9 and 10 were rejected under 35 USC 103(a) as being unpatentable over Chung in view of Kweon, Biomaterials, 24 (2003) 801-808 ("Kweon"). As detailed above, Chung fails to disclose a copolymer consisting essentially of caprolactone units and fumarate units as recited in amended claim 2. Kweon describes a polymer formed by reacting acryloyl chloride and polycaprolactone. Acryloyl chloride has the formula



It is believed that the reaction of Kweon will produce a copolymer with acrylate groups, not fumarate groups. The biodegradability problems with acrylate groups are described at page 2, line 29 of the present specification. It is submitted that Kweon fails to make up for the deciencies of Chung and therefore, the rejection under Chung and Kweon has been overcome by the amendments to claim 2.

Conclusion

No fees are believed to be needed for this amendment. However, if fees are needed, please charge them to Deposit Account 17-0055.

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